

LEGENDARY ABS II

from Health For Life

The Routines Illustrated

Speed Key

Treat the rep/second guidelines given below as averages. Don't feel you need to match them exactly—just go for what feels like a fast, medium, or slow pace relative to the particular exercise.

(f) = fast (about 2 reps per second)
(m) = medium (about 1 rep/second)
(s) = slow (about 1 rep/2 secs.)

LEVEL A

HFL Lying Leg Thrusts 15 reps (m)	1/4 Sit-Ups 25 reps (s)	10 second rest	HFL Lying Leg Thrusts 15 reps (m)
--------------------------------------	----------------------------	----------------	--------------------------------------

1/4 Sit-Ups
20 reps (m)

LEVEL 1

HFL Lying Leg Thrusts 25 reps (m)	15 second rest	HFL Lying Leg Thrusts 20 reps (m)	Abdominal Crunches 25 reps (s)
--------------------------------------	----------------	--------------------------------------	-----------------------------------

1/4 Sit-Ups
10 reps (f)

LEVEL 2

Hanging Knee-ups 10 reps (m)	15 second rest	Hanging Knee-ups 8 reps (m)	Abdominal Crunches 25 reps (s)
---------------------------------	----------------	--------------------------------	-----------------------------------

Abdominal Crunches
15 second rest
20 reps (f)

LEVEL 3

Hanging Knee-ups 15 reps (m)	15 second rest	Hanging Knee-ups 10 reps (m)	HFL Lying Leg Thrusts 15 reps (s)
---------------------------------	----------------	---------------------------------	--------------------------------------

Abdominal Crunches
20 reps (m)

1/4 Sit-Ups
10 reps (f)

LEVEL 4

Hanging Knee-ups 10 second rest	Hanging Knee-ups 10 reps (m)	HFL Lying Leg Thrusts 15 reps (s)
------------------------------------	---------------------------------	--------------------------------------

10 second rest

HFL Lying Leg Thrusts
10 reps (m)

Abdominal Crunches
15 reps (s)

1/4 Sit-Ups
10 reps (f)

LEVEL 5

Hanging Knee-ups 25 reps (m)	10 second rest	Hanging Knee-ups 20 reps (m)	HFL Lying Leg Thrusts 20 reps (m)	10 second rest
---------------------------------	----------------	---------------------------------	--------------------------------------	----------------

HFL Lying Leg Thrusts
15 reps (m)

Abdominal Crunches
35 reps (s)

1/4 Sit-Ups
15 reps (f)

LEVEL 6

Hanging Leg Raises 8 reps (m)	10 second rest	Hanging Leg Raises 8 reps (m)	Hanging Knee-ups 10 reps (m)
----------------------------------	----------------	----------------------------------	---------------------------------

Abdominal Crunches
35 reps (s)

1/4 Sit-Ups
15 reps (f)

LEVEL 7

Hanging Leg Raises 10 reps (m)	Hanging Knee-ups 5 reps (m)	15 second rest	Hanging Leg Raises 8 reps (m)
-----------------------------------	--------------------------------	----------------	----------------------------------

Hanging Knee-ups
8 reps (m)

HFL Lying Leg Thrusts
25 reps (m)

Abdominal Crunches
35 reps (s)

1/4 Sit-Ups
15 reps (f)

LEVEL 8

Hanging Leg Raises 10 reps (m)	Hanging Knee-ups 5 reps (m)	10 second rest	Hanging Leg Raises 10 reps (m)
-----------------------------------	--------------------------------	----------------	-----------------------------------

Hanging Knee-ups
8 reps (m)

HFL Lying Leg Thrusts
30 reps (m)

10 second rest

HFL Lying Leg Thrusts
25 reps (m)

Abdominal Crunches
35 reps (s)

1/4 Sit-Ups
15 reps (f)

Knee Rock-backs
15 reps (m)

LEVEL 9

Hanging Leg Raises 12 reps (m)	Hanging Knee-ups as many as possible (m)	10 second rest	Hanging Leg Raises 10 reps (m)
-----------------------------------	---	----------------	-----------------------------------

Hanging Knee-ups
as many as possible (m)

HFL Lying Leg Thrusts
30 reps (m)

10 second rest

HFL Lying Leg Thrusts
20 reps (m)

Cross-Knee Abdominal Crunches
as many as possible (s)

Abdominal Crunches
15 reps (f)—Good Luck!

1/4 Sit-Ups
15 reps (f)—Good Luck!

Knee Rock-backs
20 reps (m)

What *Legendary Abs II* will do for you...

Legendary Abs II is a scientifically-designed program for maximizing abdominal muscle definition. **Regardless of your present condition or training experience, *Legendary Abs II* guarantees greater gains in less time than any other program.**

The routines in *Legendary Abs II* are the result of four years' research at Stanford University, during which a research team studied hundreds of bodybuilders, gymnasts, martial artists, and wrestlers to learn how dedicated athletes approach abdominal conditioning. The researchers evaluated existing physiology studies and conducted new ones. Their findings formed the basis for this unique program.

Today, thousands of amateur and professional athletes around the world are using *Legendary Abs*—with more discovering it every month. Their results have established *Legendary Abs* as the fastest and most effective abs program ever developed.

Just how effective? Ninety-five percent of all newcomers to the program show improvement in abdominal tone within the first two weeks. Even advanced bodybuilders find they can develop and maintain the kind of contest-winning definition once thought to require daily 30-minute Roman Chair workouts just by using this simple 6-minute program four times a week!

You'll feel it—from the very first workout. *Legendary Abs II* will actually make your abs burn the way a good bicep workout makes your biceps burn!

Please note: The secret of the program's effectiveness is not in the exercises alone, but in the way they *interact*. This is synergism—creating a whole greater than the sum of the parts. You may already be doing some of these exercises. If so, you'll be amazed how much more effective they become when combined exactly as indicated. **It is the specific per-level sequence, timing, and overall progression that make our program such a powerful conditioning tool.**

So get ready. You're about to join athletes worldwide who've found the secret to fast, phenomenal ab gains. Good luck!

Also by Health For Life:

- **Beyond Legendary Abs**
A synergistic performance guide to Legendary Abs and SynerAbs
- **Power ForeArms!**
- **Maximum Calves**
- **The Human Fuel Handbook**
Nutrition for Peak Athletic Performance
- **SynerShape: A Scientific Weight Loss Guide**
- **SynerStretch: For Whole Body Flexibility**
- **The Psychology of Weight Loss:**
A Guided Introspection
- **Secrets of Advanced Bodybuilders**
A manual of synergistic weight training for the whole body
- **Secrets of Advanced Bodybuilders: Supplement #1**

Please Note:

This program contains exercises that, depending on your physical condition, may be hazardous to your health. Consult with your doctor before attempting these exercises. It is also important that you use care in performing the exercises in this book, since improper performance could result in injury.

User assumes all risk for performing the exercises described in this course. Use of this course constitutes a covenant not to bring any lawsuit or action for injury caused by performing exercises illustrated in this course.

ISBN 0-944831-20-6

Copyright © 1989 by Health For Life
Portions copyright © 1981 by Health For Life
All rights reserved.

1 2 3 4 5 6 7 8 9

The material in this document may not be reproduced in whole or in part in any manner or form without prior written consent from Health For Life.

Health For Life
8033 Sunset Blvd., Suite 483
Los Angeles, CA 90046
(213) 450-0070

THE THEORY

It's incredible how wrong traditional training "wisdom" can be. Did you know, for example, that the Straight-Legged Sit-Up is not an efficient ab exercise—and that it's actually dangerous? Or that for serious training, Roman Chairs are about as useful as rocking chairs?

WHAT MAKES LEGENDARY ABS

Optimum muscle conditioning depends on the application of certain key principles of biomechanics. Using these, one can distinguish effective, safe exercises from ineffective, potentially injurious ones, and determine how best to structure a routine. This biomechanical basis is what separates *Legendary Abs* from traditional methods of conditioning abdominal muscle.

But great-looking abs are not just the result of the muscle you have—they're also the result of the fat you *don't* have.

Below, we'll run over the distinction between fat reduction and muscle conditioning, and then explore how to—and how not to—train the abs.

Muscle

Muscle tissue has a very special characteristic: *the ability to contract*. When stimulated by the central nervous system, muscle fibers shorten to about two-thirds of their original length. Thanks to the clever ways those fibers are positioned, humans can do amazing things, like run 4-minute miles, scale mountains, and perform delicate surgical procedures.

The abdominals in particular, besides enabling movements of the torso, help protect the body. Running from the bottom of the ribs to the top

of the pubic bone, they shield the internal organs of the abdomen.

The abs are also essential to good posture. They act with the *spinal erectors* to hold you and your spine upright, much the way opposing guy-wires support a tent pole.

At least, that's what they're designed to do.

Soft, out-of-shape abdominals do little supporting or protecting—nor do they add much to your appearance. Still, it's important to understand that poorly-conditioned abdominals are *not* the culprit behind the midsection "spare tire." The culprit is excess fat.

Fat

Fat and muscle are two distinct types of tissue. In the abdominal region, as in all areas of the body, a fat layer covers the muscles. The thicker the fat layer, the harder it is to see your abs no matter *how* well developed they are.

Getting rid of unwanted fat, if that is your goal, is simply a matter of adjusting diet and activity level so you use more calories than you consume (creating a *calorie deficit*).

CALORIE DEFICIT → FAT LOSS

FEWER CALORIES IN (diet)	+	MORE CALORIES OUT (aerobic exercise)
-----------------------------------	---	---

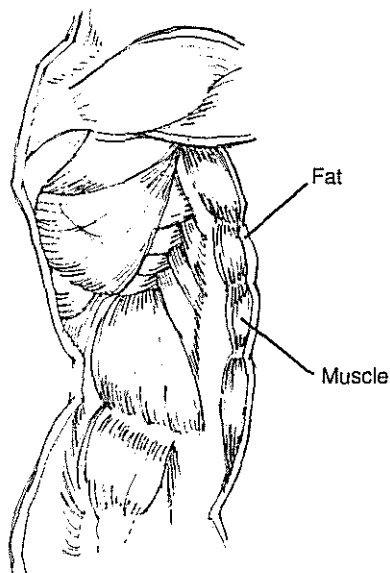


Fig. 1 Fat and muscle are separate layers

This is advice most people know and few follow. Still, it's the simple truth. Doing muscular work requires energy; your body draws that energy from the food you eat and from your fat stores. If you decrease food intake and/or increase energy output, you'll lose fat.

Spot Reducing

Many people mistakenly believe that they can burn fat from around their middle by doing ab exercises—sit-ups, side bends, etc. The fact is, **spot reducing doesn't work**. Doing exercises for any single muscle group doesn't burn enough calories to noticeably reduce fat. Furthermore, when fat does come off, it comes off from all over the body—not just from the area being worked.

To get rid of excess fat, regardless of where it is, you must do exercises involving as many major muscle groups as possible—exercises like running, swimming, cycling, aerobic dance, or jumping rope—and you must do them consistently over a period of time.

For more detailed weight loss recommendations, see Health For Life's course, *SynerShape: A Scientific Weight Loss Guide*.

CONDITIONING ABDOMINAL MUSCLE

To condition abdominal muscle most effectively, it's necessary to do exercises that...

- **target the abs**—involve movements directly caused by the abs, not simply movements in which the abs play a supporting role (many traditional "ab" exercises *don't* meet this criterion)
- **overload the abs**—force them to do more work than they're accustomed to
- **work the abs from a variety of angles**—to ensure maximum fiber involvement

The Good Word On Sit-Ups: *Don't Do Them!*

At first thought, Straight-Legged Sit-Ups and Roman Chair Sit-Ups seem to satisfy the requirements above. Both movements center around the midsection and both cause an abdominal "burn."

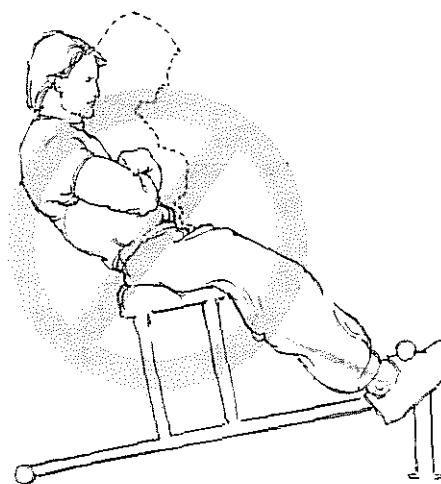


Fig. 2 Roman Chair Sit-Ups

Actually, though, the abdominals have a much narrower range of motion than either of these types of sit-ups require. Two-thirds of the Straight-Legged Sit-Up is the work of muscles other than the abdominals. And although the abs play a stabilizing role during Roman Chair Sit-Ups, they are in no way responsible for the Roman Chain situp *movement*.

Here's the rule to know: If you lie on your back with your legs extended, your abs have the capacity to raise your shoulders about 30° off the floor. No further. **Any exercise that involves movement beyond that 30° range involves muscles other than the abs.**

Is it necessarily bad to involve other muscles? In this case, yes. These other muscles, the *psoas magnus* and *psoas parvus*, run from the front of the legs, up through the pelvis, and attach to the lowest six spinal vertebrae. They pull your trunk toward your legs, as do your abs. But unlike the abs, their range of motion is huge: they can flex you forward all the way from a full backbend until your chest touches your knees.

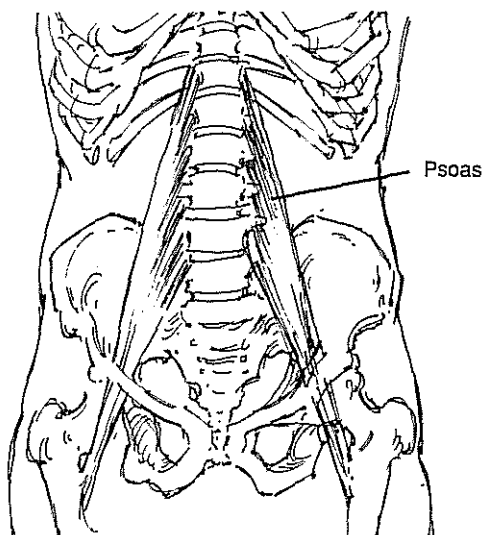


Fig. 3 The psoas muscles

The psoas work most efficiently when your legs are extended and/or your feet are held—as in Straight-Legged and Roman Chair Sit-Ups. In

this position, the psoas compete with your abs for the first third of the movement, and then take over entirely for the remainder.

Psoas-dominated movements yield very little—in terms of ab results—for all energy you put into them. This is the reason you see some athletes rocking through several *hundred* Roman Chair Sit-Ups, trying for a burn. Any movement you can do that many of is not an efficient muscle conditioning exercise.

Worse, though, is the risk of injury from psoas-dominated movements. With each Straight-Legged or Roman Chair Sit-Up, the psoas tug at the lower spine. That tug doesn't do much harm as long as the abs remain strong enough to prevent the back from arching. But unfortunately, even if you're in great shape, the abs tire fairly quickly, allowing your back to arch. This causes the vertebrae around the psoas' attachment to grind together. And in a decade or so you may be stuck with permanent lower back pain as a result of disk degeneration.

Kinesiologists have long warned against any supposed "abdominal" exercise where both:

- the psoas come into play
- the position allows—or worse, encourages—your back to arch

Based on these criteria, traditional sit-ups (both Straight-Legged and Roman Chair) must be discarded. Fortunately, there are safer and more effective exercises; these will be explained in the Program Section coming up. Some may be familiar to you, but remember, there's much more to creating the **optimum** routine than the exercises themselves.

SYNERGISM: The Critical Element

For a given series of exercises, there is always *one specific sequence* that affords maximum benefit to all the muscles involved. When per-

formed in that sequence, each exercise becomes more powerful than when performed in other sequences or alone. This is **synergism**: combining elements to create a whole greater than the sum of its parts.

The main factor determining ideal exercise sequence is the principle of Interdependency of Muscle Groups.

Often two or more muscle groups cooperate in an exercise. When this happens, it's possible for a tired muscle to limit the effort aimed at a fresh one. Properly taking into account their interdependence helps prevent this.

In the case of the abdominals, it works this way: Imagine the stomach muscles divided into **upper** and **lower abs**. This isn't an anatomical distinction, but for the sake of discussion a line is often drawn between the top two and bottom two abdominal lumps.

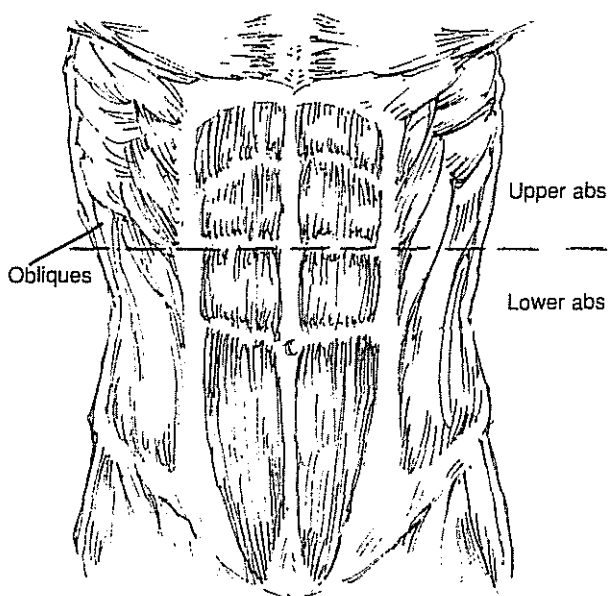


Fig. 4 The division between upper and lower abs

The upper abs can be further divided into center and outer sections.

From now on, the term *upper abs* will refer to the center section; the outer sections we'll call by their anatomical name: the *external obliques*.

First consider just the upper (center) abs and the lower abs. They are interdependent in the following way:

When you do a lower ab exercise, you use both LOWER and UPPER abs.

When you do an upper ab exercise, you use almost exclusively UPPER abs.

Notice the upper abs play a role in working both areas. If you train them first, their fatigue will limit your lower ab work, preventing the lower abs from getting a good workout. The solution is to train the lower abs first, then finish the upper abs with exercises that concentrate on them.

There's a side benefit to proper sequencing: Since the uppers become partially fatigued from the lower ab work, they don't have to be pushed very hard to get a good workout.

We can apply the same logic to oblique work. The obliques twist the torso—with support from the upper abs. Therefore oblique (twisting) exercises should precede upper ab (straight forward) exercises, so that upper ab fatigue doesn't become a limiting factor in training the obliques.

PUTTING IT ALL TOGETHER

At this point we have the three rules needed to begin putting together a synergistic abdominal conditioning routine:

- **Rule 1.** Avoid exercises that activate the psoas muscles and require a body position that allows the back to arch.

Effect of Rule 1: We eliminate many "standard" ab exercises—Straight-Legged Sit-Ups, Roman Chair Sit-Ups, Incline Board Sit-Ups, Bent-Legged, And Feet-Under-Couch Sit-Ups.

- **Rule 2.** Work lower abs before upper abs.
- **Rule 3.** Do twisting (oblique) upper ab exercises before straight upper ab exercises.

Effect of Rules 2 and 3: We sort the remaining suitable exercises into general categories reflecting the order in which they should be performed—first: exercises mainly involving lower abs; second: exercises involving twisting movements; and third, exercises mainly involving upper abs.

Remember, synergism means finding a way to exercise so that each aspect of your workout reinforces all other aspects. We've explained the logic behind the general order of exercises. Arriving at the most effective specific order *within* these categories has required years of careful experimentation.

The *Legendary Abs* routines will take you as close as you wish to the ancient Greek sculptor's idea of a well-defined midsection. The total amount of time you'll spend on one workout will never exceed six minutes.

The time it will take to reach your goal depends on your present physical condition and the consistency with which you train. It won't be long, though. If you don't have much excess fat, you should see results within a couple of weeks. Mild soreness, however, should come after the first or second workout—a definite indication that something good is happening!

REVIEW

Before going on to the Program Section, let's take a minute to review the important points we've covered so far.

- Fat reduction and muscle conditioning are two different processes.
 - Fat reduction involves creating a calorie deficit (fewer calories consumed than burned). This is accomplished by modifying the diet and doing aerobic exercise. "Spot reduction" doesn't work.
 - Conditioning muscle requires doing exercises that target and overload a specific muscle, and that work it from a variety of angles.
- If you lie on your back with legs extended, your abs have the capacity to raise your shoulders about 30° off the floor. Any movement beyond that is not the work of the abs.
- Most traditional ab exercises are motivated by the psoas muscles, not the abs. Psoas-dominated movements are inefficient for conditioning the abs. Performed consistently over time, some may cause permanent lower back injury.
- There are three general rules to follow in creating a synergistic abdominal conditioning routine:
 - Avoid exercises that both activate the psoas muscles and require a body position that allows the back to arch.
 - Work lower abs before upper abs.
 - Do twisting (oblique) upper ab exercises before straight upper ab exercises.

THE EXERCISES

Look over these exercises to become familiar with them. Following the exercise descriptions, we'll present a series of routines ranging from beginning to very advanced. Don't be surprised if some of the exercises below are similar to exercises you've done before. It's the **sequence** and **timing** of the exercises within the routines that make all the difference.

HANGING LEG RAISES

For this exercise, you need a horizontal bar from which to hang. A doorway chinning bar will work, although ideally the bar should be high enough to allow your legs to hang straight without touching the ground.

Take a slightly-wider-than-shoulder-width grip on the bar and hang.

With knees slightly bent, raise your legs until your knees almost touch your chest (Fig. 5-a). Begin this movement by rocking your pelvis forward, and maintain a forward pelvic tilt throughout the exercise. **The curling action of the pelvis is crucial**—without it the psoas are doing most of the work, not the abs (Fig. 5-b).

Hold for one second, then lower your legs.

Perform the reps slowly enough that your body doesn't swing. Also, keep your upper torso as relaxed as possible: resist the temptation to do a partial pull-up with each rep as this wastes energy and shifts your focus off the abs.

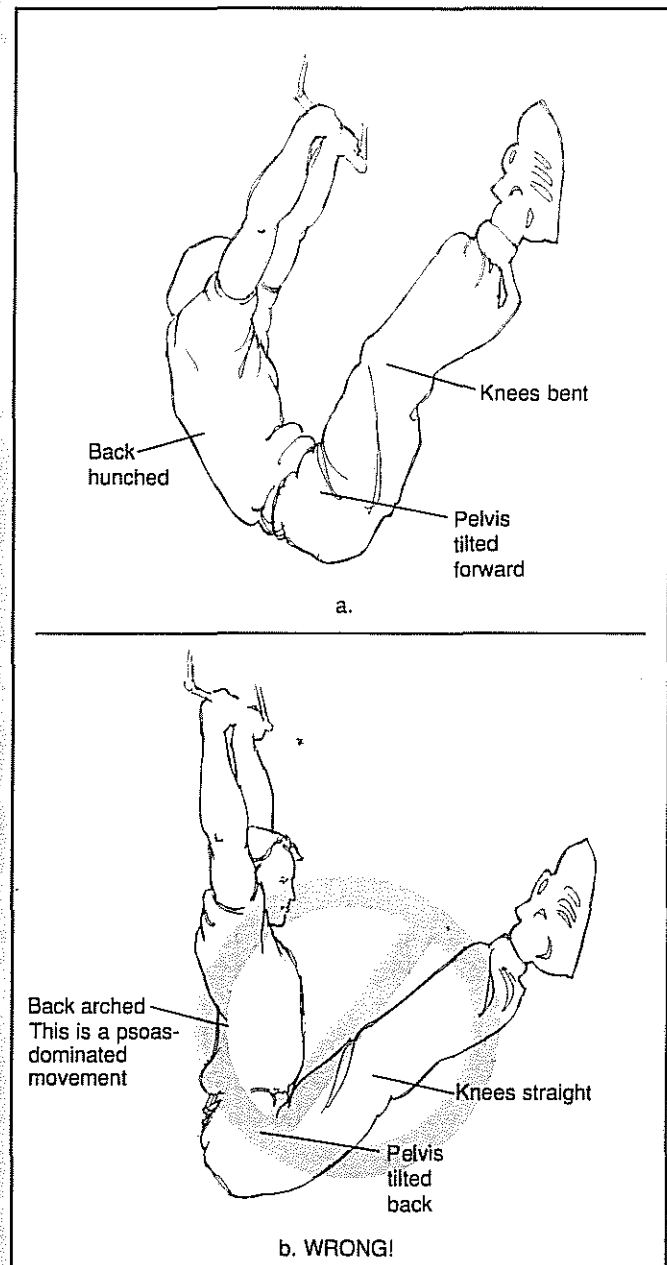


Fig. 5

If you find that your arm and shoulder strength limit your ability to hang, try one of the following alternate approaches to Hanging Leg Raises.

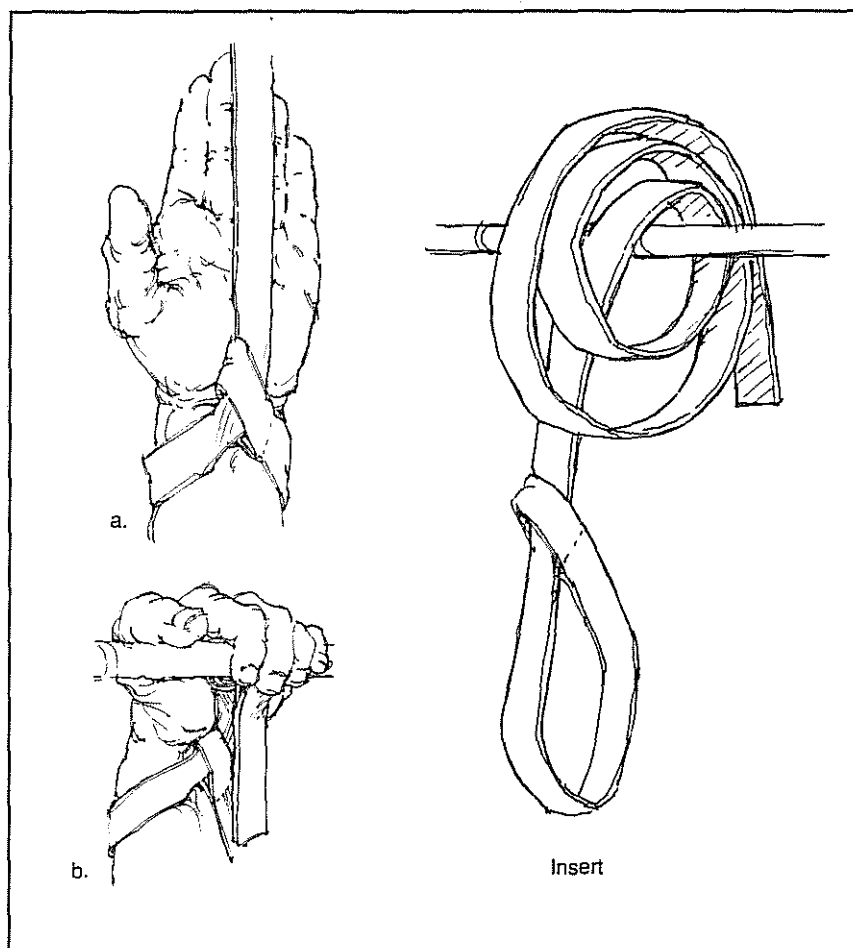


Fig. 6

Using Wrist Straps

Wrist straps, or weight-lifting straps, are short canvas strips which wrap around the wrist and around the bar (Fig. 6-a,b). They take much of the stress off of the forearm muscles—the “gripping muscles” of the hand.

To use, wrap the straps several times around the bar (see insert) and grip them. You should only need to grip the straps tightly enough to keep them from unravelling. If the straps are positioned correctly, you should feel the stress transferred to your wrists.

Using Arm Slings

Arm slings are loops of leather or fabric which hang from the chinning bar (Fig. 7-a). They are an effective way to spare your arms the stress of hanging, but they must be used carefully because they can encourage your back to arch, increasing psoas involvement (Fig. 7-e). If you use arm slings, make a special effort to maintain an upward tilt of your pelvis to prevent your back from arching (Fig. 7-d).

To use, slide your arms through the loops to a point just below your armpits (Fig. 7-b; you may need to stand on a stool to do this). The further in you can comfortably place the strap, the less effort it will take to hold yourself in position.

We recommend wearing a sweatshirt to protect your skin from possible abrasion. Perform the exercise as detailed on the previous page.

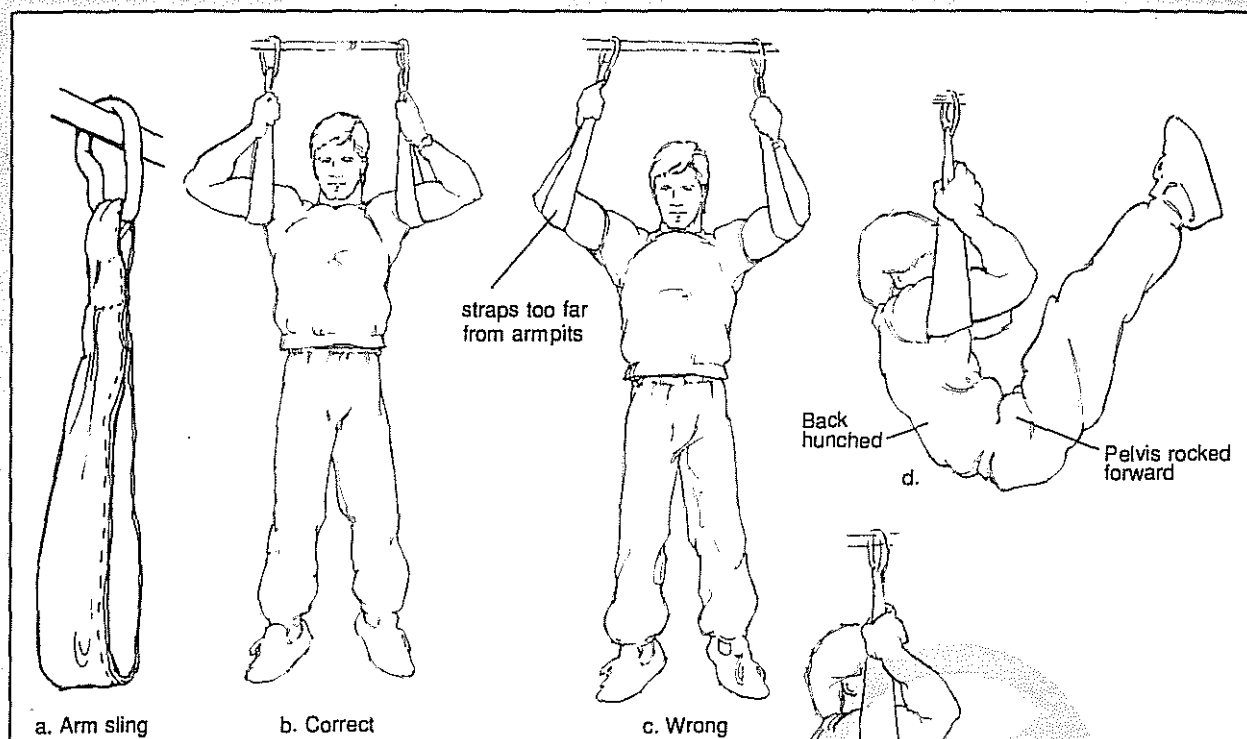


Fig. 7

HANGING KNEE-UPS

These are identical to the previous exercise except that here you fully bend your knees as you lift, and, if possible, lift them all the way to your chest (Fig. 8).

You may use the alternate approaches—wrist straps or arm slings—if your arm and shoulder strength limits your ability to hang.

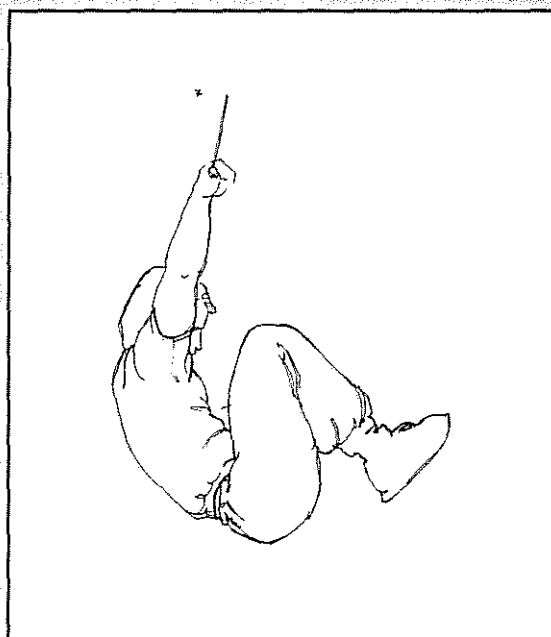


Fig. 8

HFL LYING LEG THRUSTS

*(Previous editions of **Legendary Abs** included two types of leg raises. Our recent research has shown that of the two types, the one detailed here is safer and more effective.)*

We developed this exercise to counter the two main drawbacks of traditional Lying Leg Raises—lack of adequate ab involvement, and lower back stress.

Lie on your back on a soft mat or carpet. Place your fists under your pelvis on either side of your tailbone, palms down. The effect of this should be to keep your pelvis partially tipped up toward your stomach and your lower spine pressed against the ground.

Your lower back should be flat on the floor at the start of the exercise. Adjust your hand position to prevent your back from arching.

With fists supporting your hips, raise your head—and shoulders, if possible—slightly off the ground. To assume this position requires abdominal strength and will make the exercise harder. It will also make it virtually impossible for your back to arch, thereby guaranteeing maximum ab involvement.

If you're not strong enough to raise your head and shoulders, start gradually. Raise only your head and do fewer reps. Five reps with good form is better than fifty without. Eventually, the strength will come.

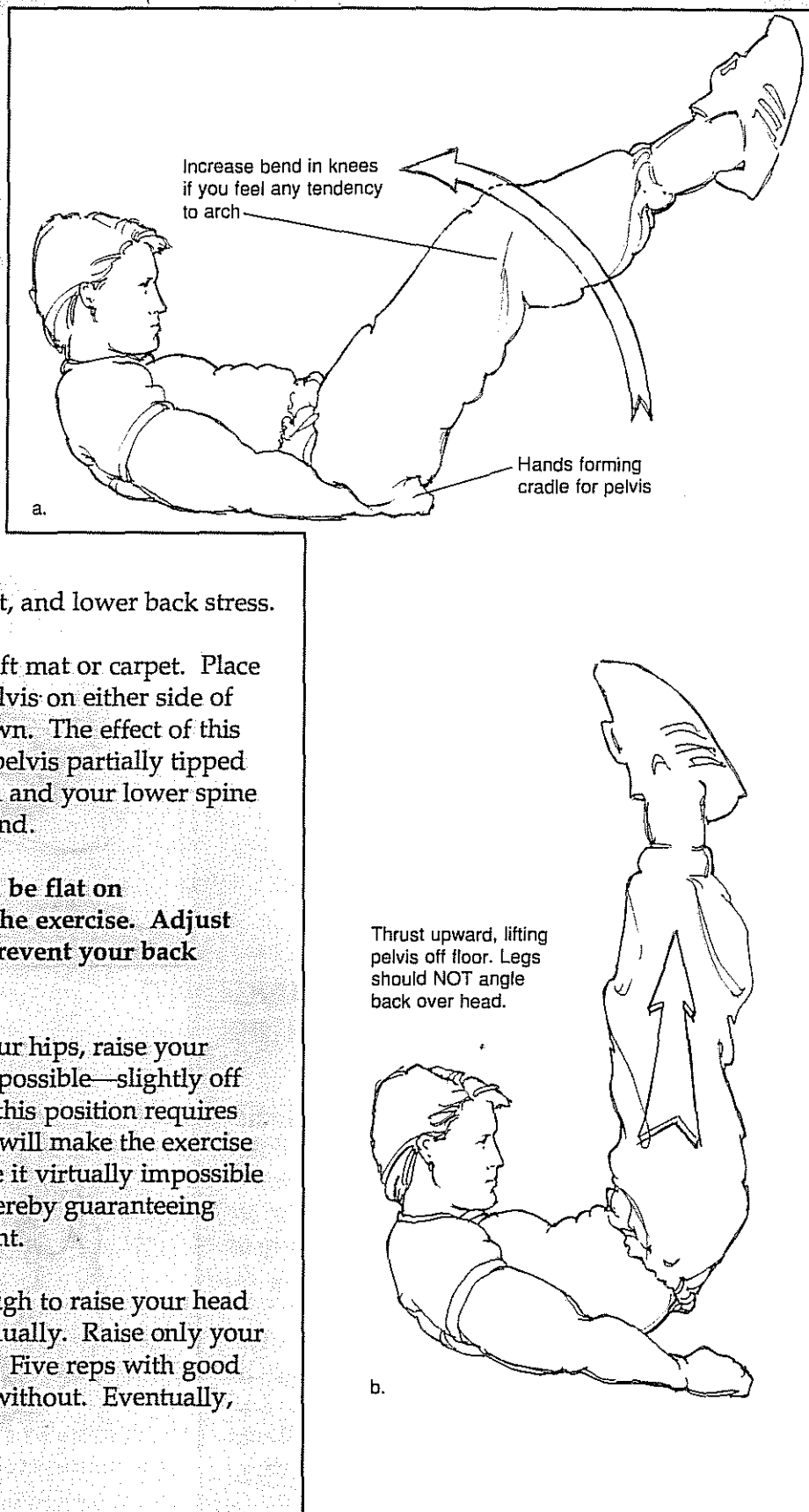


Fig. 9

Starting Position

Raise your legs about fourteen to eighteen inches off the floor—high enough that you can feel your lower back flat against the floor. Bend your knees slightly (Fig. 9-a). If you feel any tendency to arch your back, start higher and/or increase the bend in your knees.

The Movement

Hinging at the waist, raise your legs and pelvis until your feet point straight up. At this point, thrust upward from your pelvis, as though trying to stamp your footprints on the ceiling (Fig. 9-b). Then drop straight down, retracing the upward path, and allow your legs to return to the starting position.

Each rep should feel like a two-part motion, an upswing and a vertical thrust. Keep the parts distinct: swing, thrust—then, coming down: drop pelvis, drop legs.

ABDOMINAL CRUNCHES

Lie in standard bent-knee sit-up position (Fig. 10-a) and very slowly raise your shoulders and upper back about 30 degrees off the ground (Fig. 10-b). Hold for about one second. Return to starting position.

Note: Keep your arms in place (palms against back of your head, elbows out) but as relaxed as possible. Do not pull against the back of your head. Pulling won't make the movement any easier—it will simply put unnecessary stress on your neck.

One full rep should take at least 2 seconds.

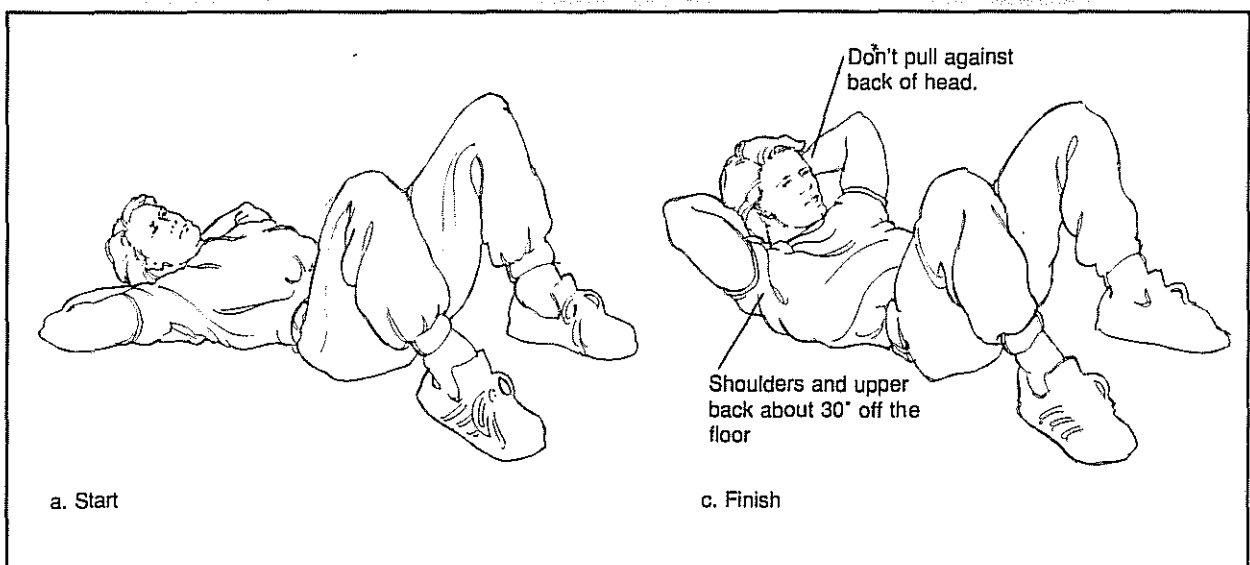


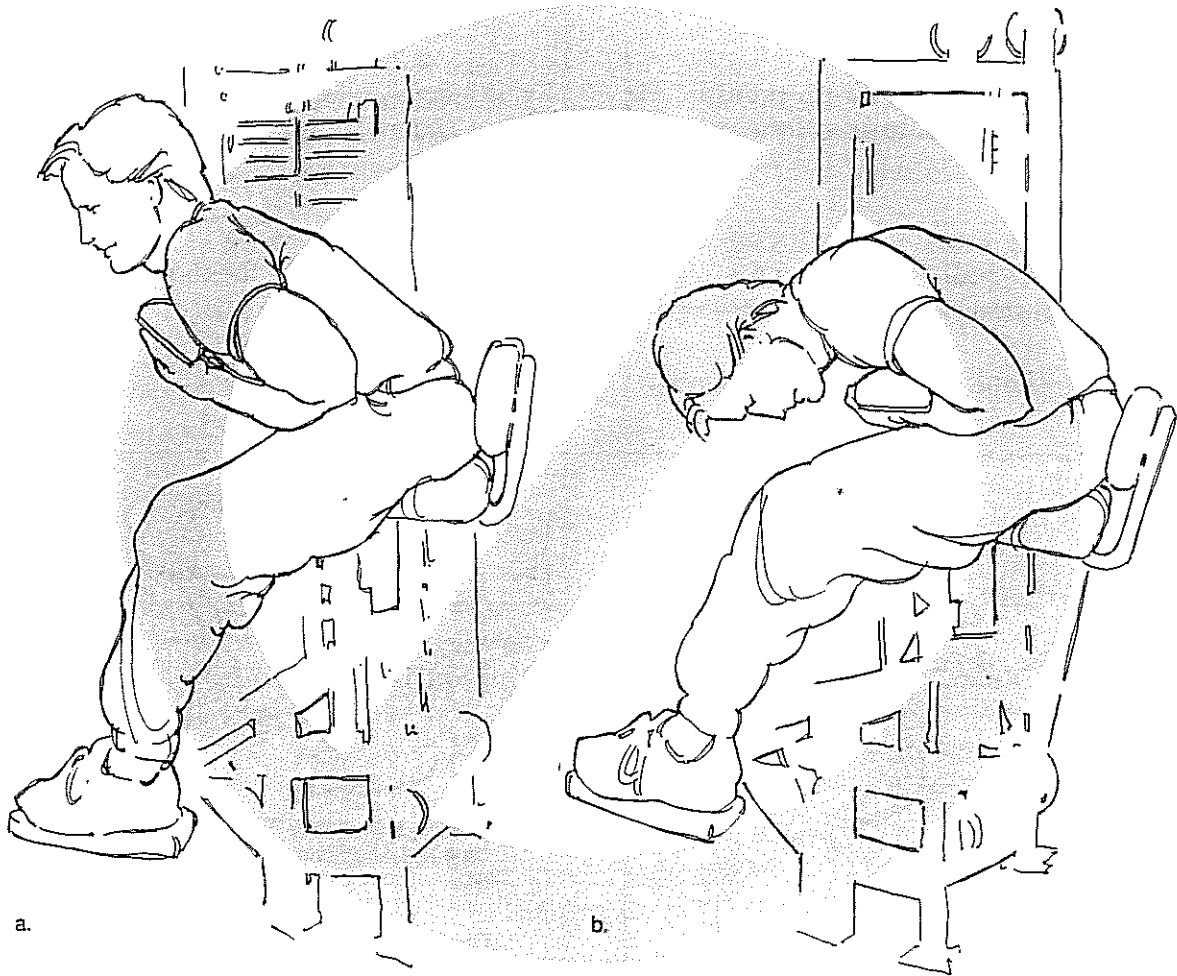
Fig. 10

IMPORTANT TECHNIQUE POINT

Bodyweight Ab Crunches vs. Abdominal Crunch Machines

Several popular machines attempt to develop the abs by providing resistance against a crunch-like movement. Most of these machines contact your torso high on the chest, forcing you to hinge at the hips, rather than the waist (a). The result is a psoas contraction with very little ab involvement. The better machines contact you lower on the torso, allowing you to curl more from the waist (b). Even these machines, though, involve the psoas to a greater degree than is desirable.

A properly-done Pull Down Ab Crunch (page 16) will provide all the benefit of the *best* ab machine, with limited psoas involvement.



CROSS-KNEE ABDOMINAL CRUNCHES

Lie in bent-knee sit-up position (Fig. 11-a) and slowly raise your shoulders, upper back, and *right hip*. Your right shoulder should aim toward your left knee (Fig. 11-b). Feel for a contraction along the right side of the abdomen. Hold for at least a second; then slowly return to the starting position. Alternate sides.

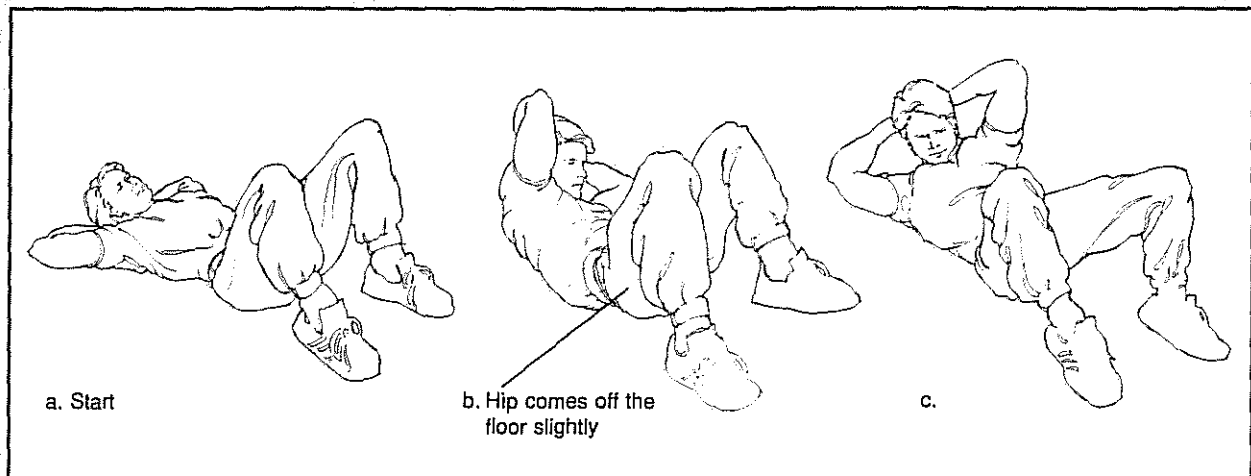


Fig. 11

1/4 SIT-UPS

Lie on your back with legs elevated so that your hips and your knees both form right angles (Fig. 12-a). Raise and lower your torso as quickly as you can.

An important difference between these and Abdominal Crunches is that in this case you should think "up" with the torso, rather than "to the knees," as you do during Crunches. This varies the stress on the abs and assures greater definition (Fig. 12-b).

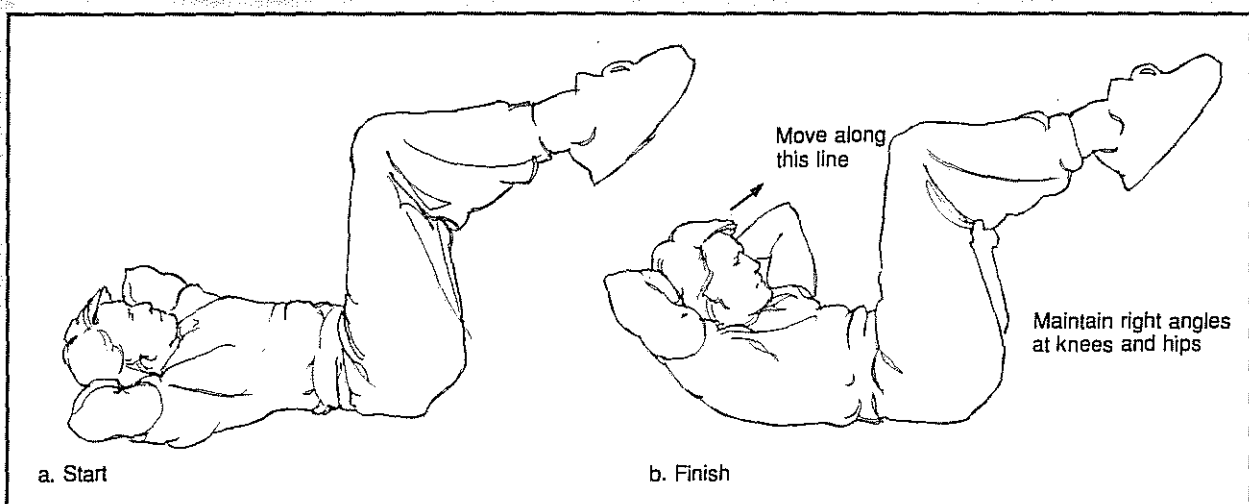


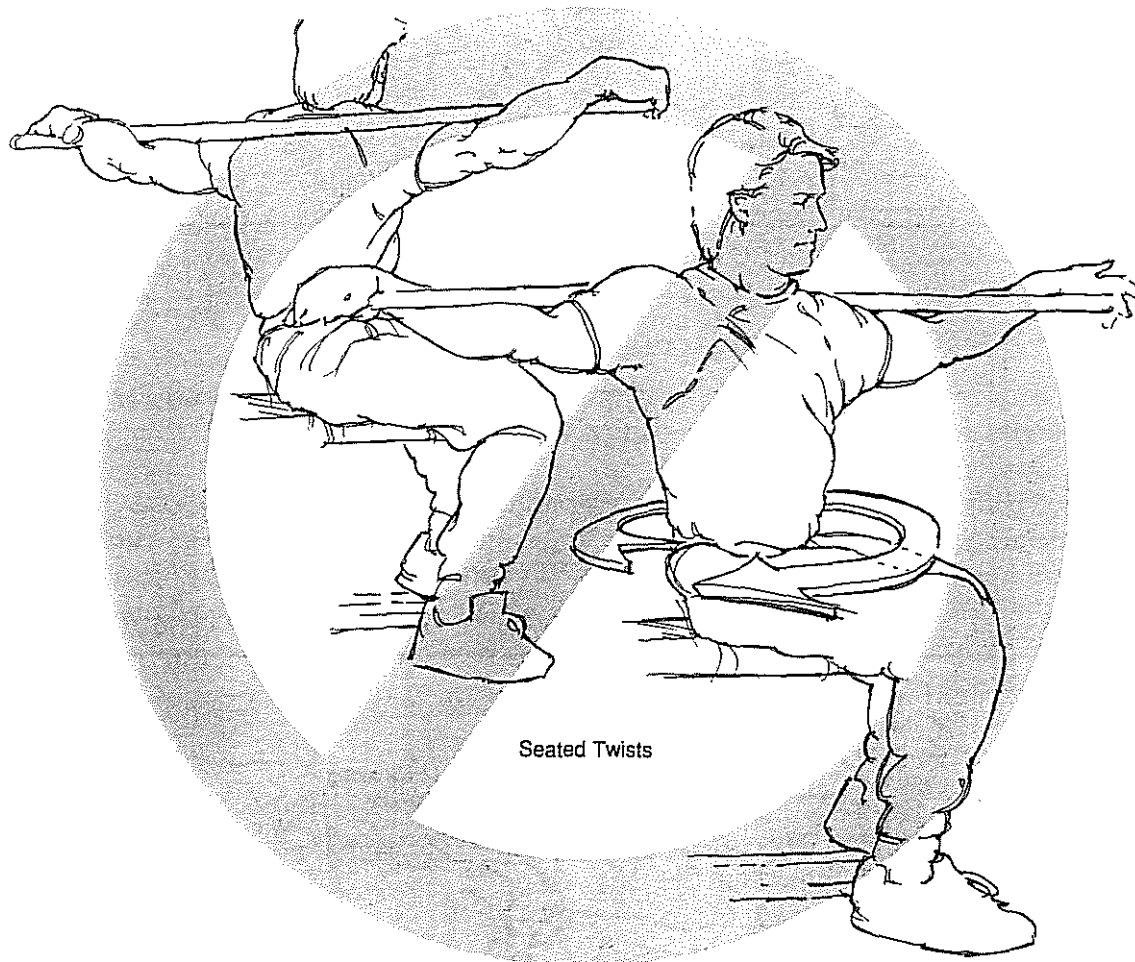
Fig. 12

IMPORTANT TECHNIQUE POINT

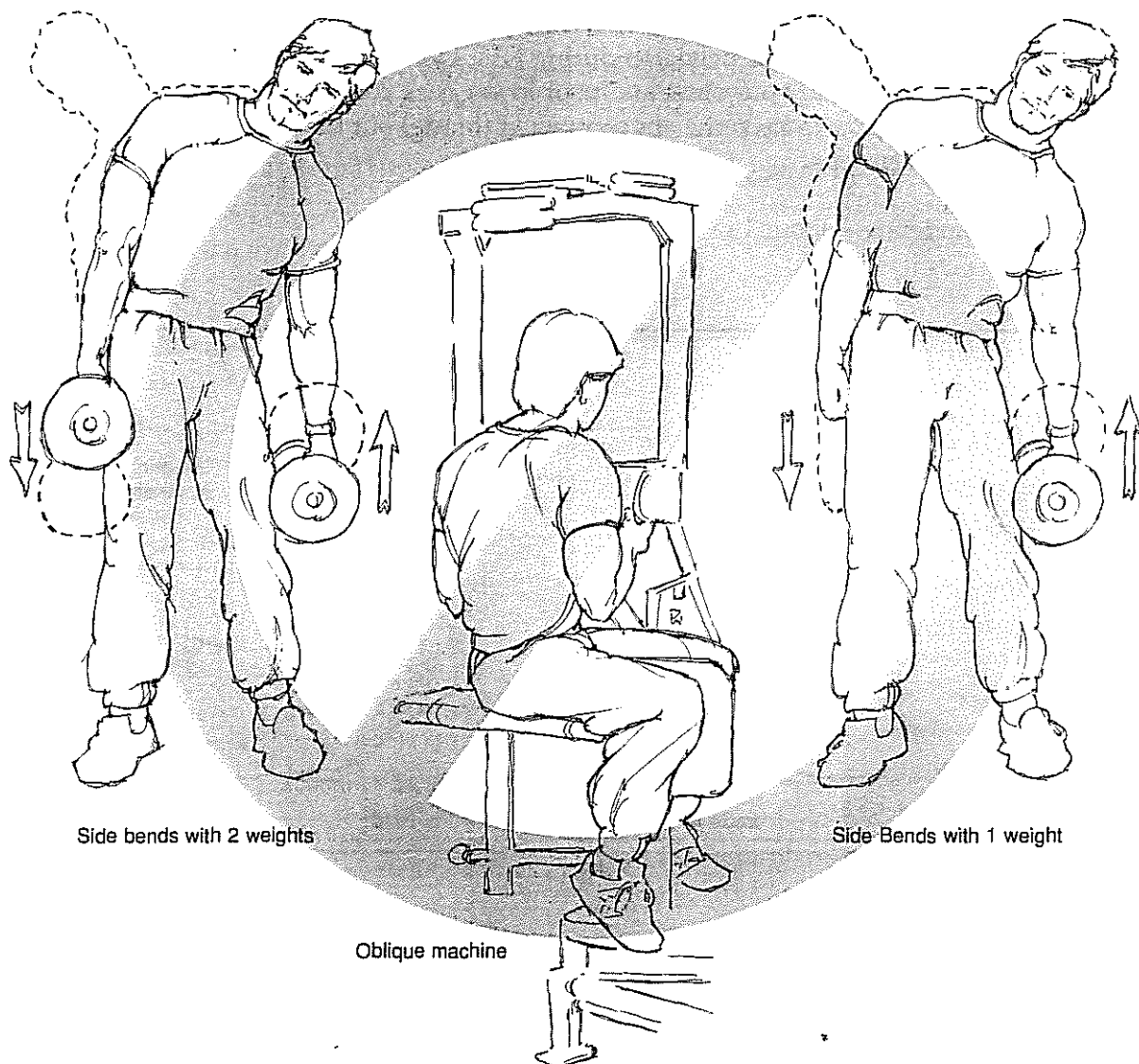
External Oblique Exercises—the Truth About “Love Handles”

Love handles are fat deposits which form on the sides of the waist. Often, athletes attempt a spot reduction of these areas using exercises aimed at the external obliques—the muscles which lie beneath the fat layer. At best, these exercises are ineffective and cause no change in the condition; at worst they build up the obliques, making the love handles appear even bigger.

The external obliques are quick to respond to any training, and will grow if overloaded. Even if you aren't troubled by excess fat at your sides, we recommend against the following exercises because of the risk of building unsightly *muscular* bulges through too much overloading of the obliques.



There is essentially no resistance during Seated Twists, making it more of a ballistic stretch than an effective exercise. The only time the abs are under tension is at the moment of change of direction.



Side bends with 2 weights

Side Bends with 1 weight

Oblique machine

All three of these exercises place too much stress on the obliques, virtually guaranteeing overdevelopment.

In some cases, an athlete may have a special reason to train the obliques—for example, a dancer or gymnast may use a low-resistance plyometric exercise like Seated Twists to develop more explosivity during rotational movements; a football player or wrestler may use Side Bends or the oblique machine to develop added mass and functional strength.

However, if you want your abs to have a lean, well-balanced appearance, the limited twisting movements at the higher levels of *Legendary Abs* will provide the ideal amount of oblique conditioning. When it comes to oblique training, less is more.

KNEE ROCK-BACKS

Begin in bent-knee sit-up position, feet on the floor, arms straight and extended, palms against the floor forming a cradle for your pelvis, as during HFL Lying Leg Thrusts (Fig. 13-a). Roll backward until your knees hit your chest and your lower back comes off the floor (Fig. 13-b). Lower and repeat. In order to keep the abs contracted throughout the set, don't return your feet to the floor between reps.

Pace should be moderate—about 1 rep per second.

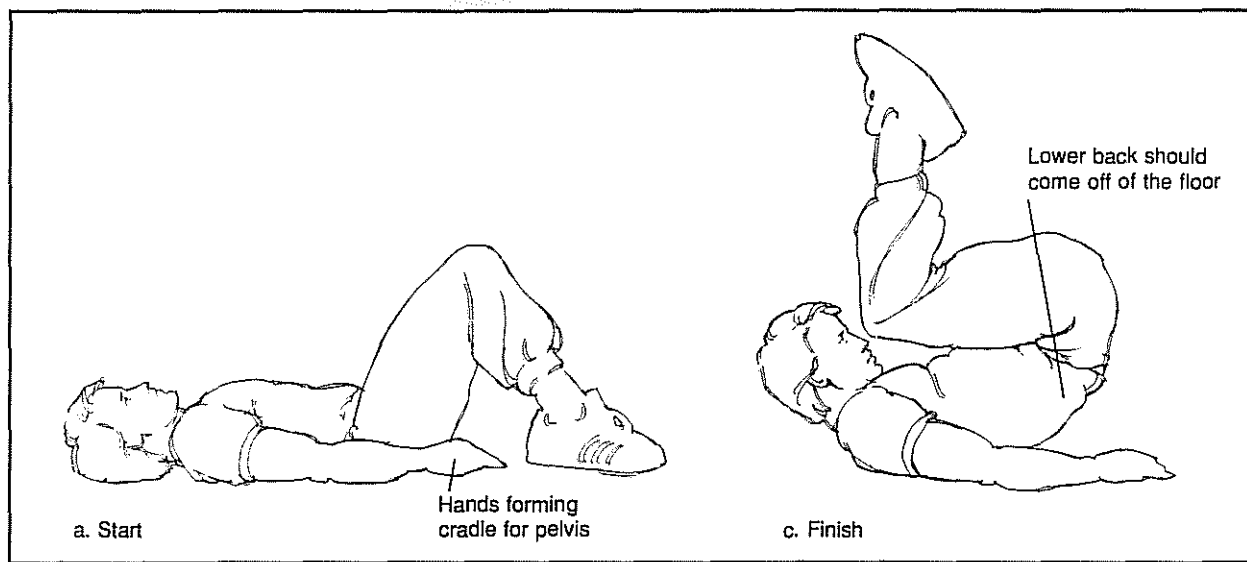


Fig. 13

PULL-DOWN AB CRUNCHES

This last exercise is optional. Requiring equipment found in most gyms, it is included for competitive or very dedicated bodybuilders who wish to "fine tune" their abs.

Drape a towel around the cable connecting to a lat pull-down bar, so that by holding both ends you can pull the bar down.

Starting Position

Kneel in front of the machine, holding the ends of the towel, and pull down until your wrists reach the top of your head. Stay far enough from the machine that the cable reaches you at a slight angle, rather than running straight down (Fig 14-a).

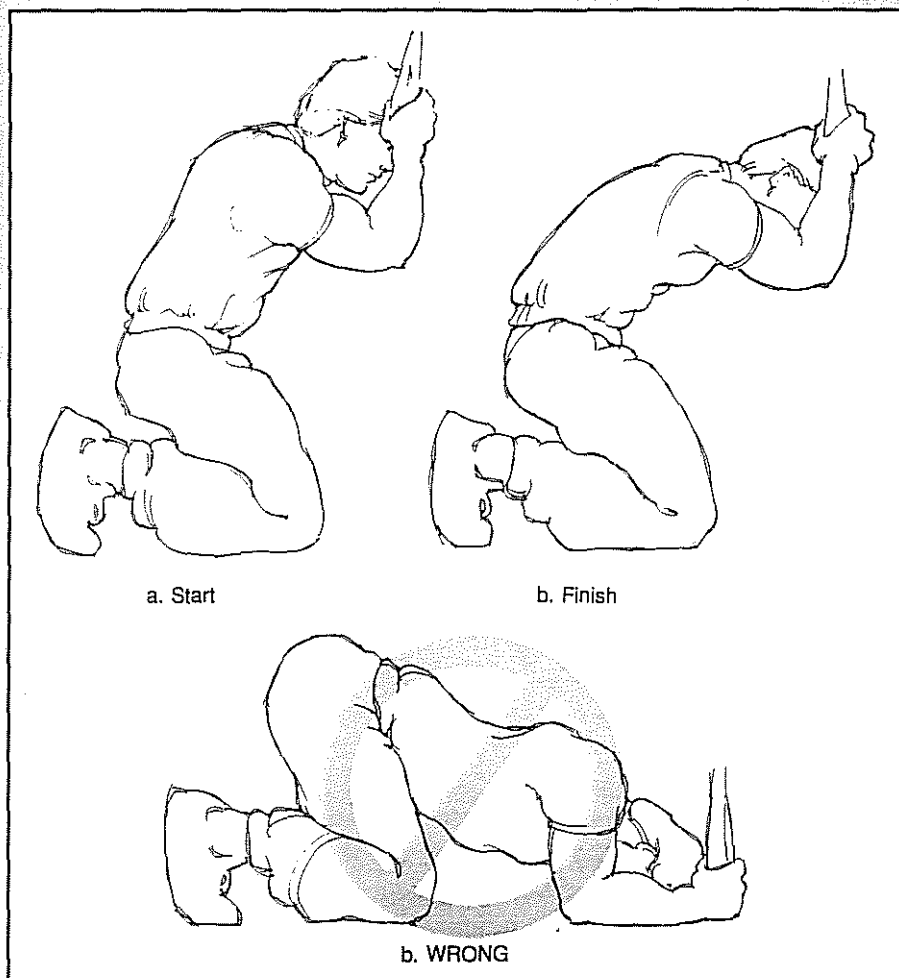


Fig. 14

The Movement

Keeping your hands against the top of your head, hunch over until your elbows come about a quarter of the way to your knees (Fig. 14-b). Don't come down any further than shown. Movement beyond this position is motivated by the psoas, not the abs. Hold for a second or two, then uncurl back to starting position.

Think of hunching over a pole running across your chest, just below your sternum. This will maximize ab involvement and minimize the psoas' contribution.

With an Elastic Strap

Pull-Down Ab Crunches can also be done using an elastic band to provide resistance. Drape the band over the top of your chinning bar, a low tree branch, etc., grip both ends (Fig. 15), and perform the exercise exactly as described above.

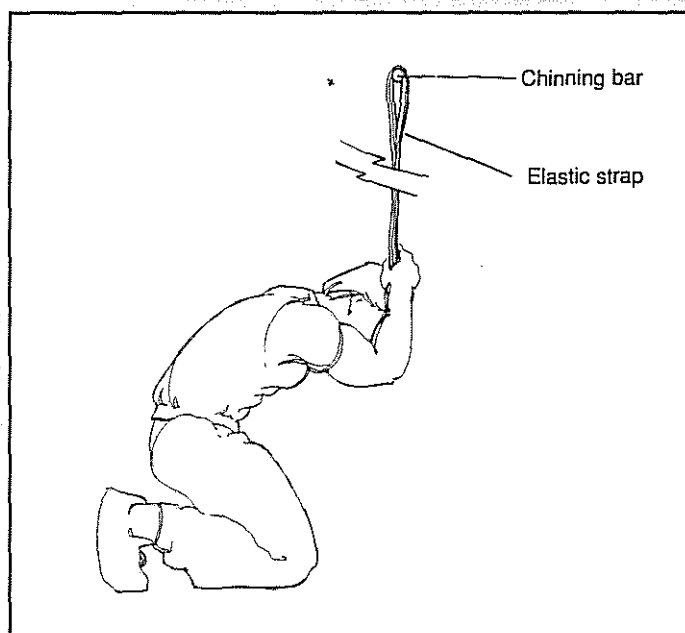


Fig. 15

SPINAL ERECTORS: The Balancing Antagonists

Throughout the body, muscle groups work in pairs to maintain a balance of strength around joints. For this reason we're including optional spinal erector work.

This exercise is not essential for abdominal development—it's here as part of an integrated approach to conditioning for *health*. A proper balance of strength between abs and spinal erectors will insure good posture and a balanced distribution of stress in daily activity.

HYPEREXTENSIONS

Hyperextensions are best done on a bench made for the purpose (found in most gyms), but they can also be done on the edge of a resilient surface like a padded table, arm of a sofa, etc., with someone holding your ankles.

Lie face down, bent at the waist, hanging over the edge of the bench (Fig. 16-a). Lightly rest your hands behind your head or neck, and slowly straighten your body to a horizontal position (Fig. 16-b). **Don't come up any higher than this.**

Throughout the motion, keep your head and shoulders arched backwards, as in a swan dive.

Don't try to lace your fingers together behind your neck; this makes it impossible to fully arch the upper back. If you maintain the proper arch, your fingers will probably just barely reach the sides of your head.

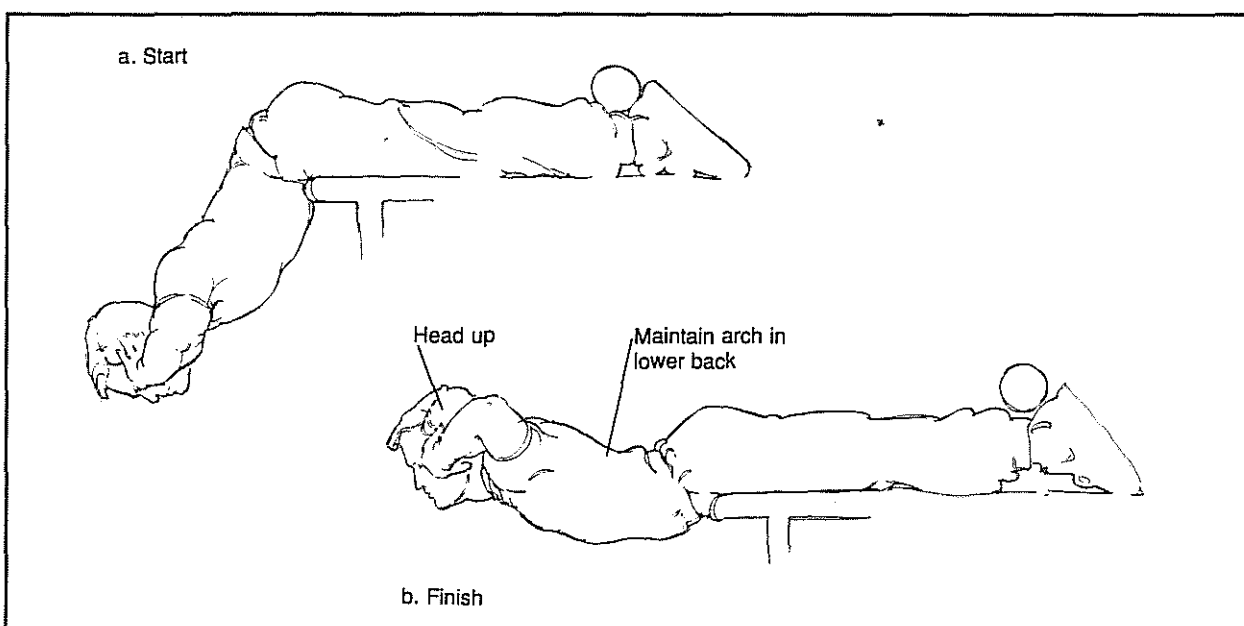


Fig. 16

THE ROUTINES

If you are beginning conditioning for the first time, start at Level A. If you've worked your abs before, but your previous training has *not* included correctly-executed Hanging Leg Raises, start at Level 1. To get the benefit of the higher levels of the program, it is essential to perform Hanging Leg Raises correctly. **Don't shortchange yourself!** Even if you're an experienced bodybuilder, you'll get better results if you build from the ground up.

When to move up. Strive to get as much out of each level as possible. There's no advantage to jumping up levels before you need to—you'll just be working harder for the same results. Although you must overload a muscle to get results, overloading too much too fast just wastes energy and increases the risk of injury.

Move to a new level when the one you're on becomes easy and you're no longer getting results. Unless both of these conditions exist, stay where you are. To help you decide when it's time to move up, take the appropriate test in the Self-Evaluation Section, beginning on page 34.

Speed Key

The markings *s*, *m*, *f*, indicate *relative* speeds. In practice, a fast pace for one exercise may be different from a fast pace for another. Treat the rep/second guidelines given below as averages. Don't feel you need to match them exactly—just go for what feels like a fast, medium, or slow pace *relative to the particular exercise*.

Note: The relative speeds of exercises in these routines have been carefully balanced to maximize the effectiveness of the program. **For best results, perform each exercise at the speed listed.** (*f*) = fast (about 2 reps per second) / (*m*) = medium (about 1 rep per second) / (*s*) = slow (about 1 rep per 2 seconds)

Level A

If you're new to conditioning exercise, start at this level.

1 Set	HFL Lying Leg Thrusts.....	15 reps (m)
	— no rest —	
1 Set	1/4 Sit-Ups	25 reps (s)
	— 10 second rest —	
1 Set	HFL Lying Leg Thrusts.....	10 reps (m)
	— no rest —	
1 Set	1/4 Sit-Ups	20 reps (m)

Level 1

This should be the entry level for everyone else except advanced bodybuilders accustomed to the form of Hanging Leg Raises shown on page 7.

1 Set	HFL Lying Leg Thrusts.....25 reps (m) — 15 second rest —
1 Set	HFL Lying Leg Thrusts.....20 reps (m) — no rest —
1 Set	Abdominal Crunches.....25 reps (s) — no rest —
1 Set	1/4 Sit-Ups.....10 reps (f)

Level 2

This level introduces you to hanging exercises, which will put much more stress on the lower abs, as well as supporting muscles of the arms, shoulders, and back. You may experience a brief period during which weaker supporting muscles temporarily limit your lower ab work. If so, consider trying a pair of wrist straps or arm slings (described on page 8) to relieve the supporting muscles of some of the stress.

1 Set	Hanging Knee-ups.....10 reps (m) — 15 second rest —
1 Set	Hanging Knee-ups.....8 reps (m) — no rest —
1 Set	Abdominal Crunches.....25 reps (s) — 15 second rest —
1 Set	Abdominal Crunches.....20 reps (f)

Level 3

1 Set	Hanging Knee-ups 15 reps (m)
	— 15 second rest —
1 Set	Hanging Knee-ups 10 reps (m)
	— no rest —
1 Set	HFL Lying Leg Thrusts 15 reps (s)
	— no rest —
1 Set	Abdominal Crunches 20 reps (m)
	— no rest —
1 Set	1/4 Sit-Ups 10 reps (f)

Level 4

1 Set	Hanging Knee-ups 20 reps (m)
	— 10 second rest —
1 Set	Hanging Knee-ups 15 reps (m)
	— no rest —
1 Set	HFL Lying Leg Thrusts 20 reps (m)
	— 10 second rest —
1 Set	HFL Lying Leg Thrusts 15 reps (m)
	— no rest —
1 Set	Abdominal Crunches 30 reps (s)
	— no rest —
1 Set	1/4 Sit-Ups 10 reps (f)

Level 5

1 Set	Hanging Knee-ups.....25 reps (m)
	— 10 second rest —
1 Set	Hanging Knee-ups.....20 reps (m)
	— no rest —
1 Set	HFL Lying Leg Thrusts 20 reps (m)
	— 10 second rest —
1 Set	HFL Lying Leg Thrusts 15 reps (m)
	— no rest —
1 Set	Abdominal Crunches.....35 reps (s)
	— no rest —
1 Set	1/4 Sit-Ups.....15 reps (f)

Level 6

This level introduces hanging leg raises, which are considerably harder than hanging knee-ups. The rep numbers are reduced to help smooth this transition.

1 Set	Hanging Leg Raises.....5 reps (m)
	— 10 second rest —
1 Set	Hanging Leg Raises.....5 reps (m)
	— no rest —
1 Set	Hanging Knee-ups.....10 reps (m)
	— no rest —
1 Set	Abdominal Crunches 35 reps (s)
	— no rest —
1 Set	1/4 Sit-Ups.....15 reps (f)

Level 7

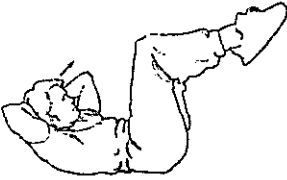
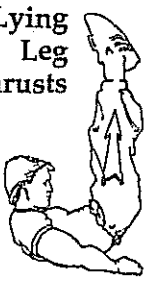
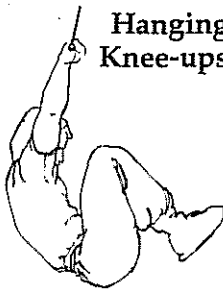
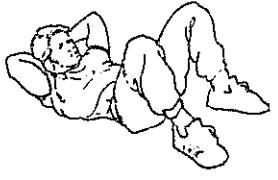
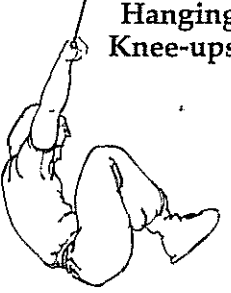
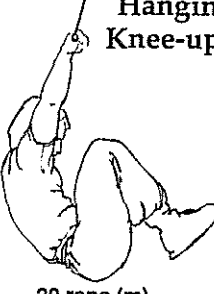
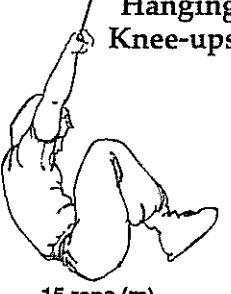
Experienced bodybuilders should begin here only if you're *already* doing Hanging Leg Raises correctly (see page 7). If you've been doing them *incorrectly*, or not at all, we strongly recommend starting at Level 1 to insure adequate neurologic retraining.

1 Set	Hanging Leg Raises 10 reps (m) — no rest —
1 Set	Hanging Knee-ups 5 reps (m) — 15 second rest —
1 Set	Hanging Leg Raises 5 reps (m) — no rest —
1 Set	Hanging Knee-ups 5 reps (m) — no rest —
1 Set	HFL Lying Leg Thrusts 25 reps (m) — no rest —
1 Set	Abdominal Crunches 35 reps (s) — no rest —
1 Set	1/4 Sit-Ups 15 reps (f)

1 Set	Hanging Leg Raises.....10 reps (m)
	— no rest —
1 Set	Hanging Knee-ups.....5 reps (m)
	— 10 second rest —
1 Set	Hanging Leg Raises.....10 reps (m)
	— no rest —
1 Set	Hanging Knee-ups.....5 reps (m)
	— no rest —
1 Set	HFL Lying Leg Thrusts.....30 reps (m)
	— 10 second rest —
1 Set	HFL Lying Leg Thrusts.....25 reps (m)
	— no rest —
1 Set	Abdominal Crunches.....35 reps (s)
	— no rest —
1 Set	1/4 Sit-Ups.....15 reps (f)
	— no rest —
1 Set	Knee Rock-backs.....15 reps (m)

Level 9

1 Set	Hanging Leg Raises 12 reps (m)
	— no rest —
1 Set	Hanging Knee-ups as many as possible (m)
	—10 second rest—
1 Set	Hanging Leg Raises 10 reps (m)
	— no rest —
1 Set	Hanging Knee-ups as many as possible (m)
	— no rest —
1 Set	HFL Lying Leg Thrusts 30 reps (m)
	— 10 second rest —
1 Set	HFL Lying Leg Thrusts 20 reps (m)
	— no rest —
1 Set	Cross Knee Ab Crunches as many as possible (s)
	— no rest —
1 Set	Abdominal Crunches as many as possible (m)
	— no rest —
1 Set	1/4 Sit-Ups 15 reps (f)
	— no rest —
1 Set	Knee Rock-backs 20 reps (m)

L E V E L A	HFL Lying Leg Thrusts  15 reps (m)	1/4 Sit-Ups  25 reps (s)	10 second rest	HFL Lying Leg Thrusts  10 reps (m)
L E V E L 1	HFL Lying Leg Thrusts  25 reps (m)	15 second rest	HFL Lying Leg Thrusts  20 reps (m)	Abdominal Crunches  25 reps (s)
L E V E L 2	Hanging Knee-ups  10 reps (m)	15 second rest	Hanging Knee-ups  8 reps (m)	Abdominal Crunches  25 reps (s)
L E V E L 3	Hanging Knee-ups  15 reps (m)	15 second rest	Hanging Knee-ups  10 reps (m)	HFL Lying Leg Thrusts  15 reps (s)
L E V E L 4	Hanging Knee-ups  20 reps (m)	10 second rest	Hanging Knee-ups  15 reps (m)	HFL Lying Leg Thrusts  20 reps (m)

The Routines *Illustrated*

1/4 Sit-Ups



20 reps (m)

1/4 Sit-Ups



10 reps (f)

Speed Key

Treat the rep/second guidelines given below as averages. Don't feel you need to match them exactly—just go for what feels like a fast, medium, or slow pace *relative to the particular exercise*.

(f) = fast (about 2 reps per second)

(m) = medium (about 1 rep/second)

(s) = slow (about 1 rep/ 2 secs.)

Abdominal
Crunches

15
second
rest



20 reps (f)

Abdominal
Crunches



20 reps (m)

1/4 Sit-Ups



10 reps (f)

HFL Lying
Leg
Thrusts

10
second
rest



15 reps (m)

Abdominal
Crunches



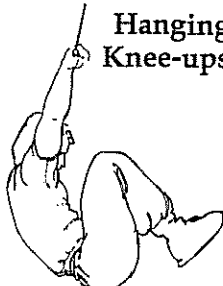
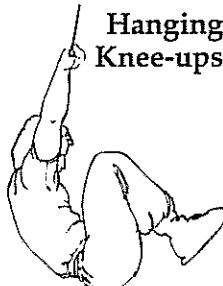
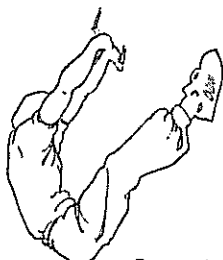
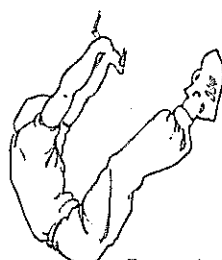
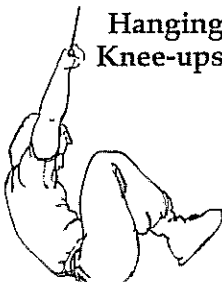
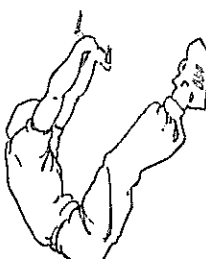
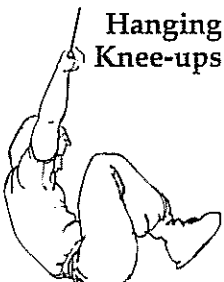
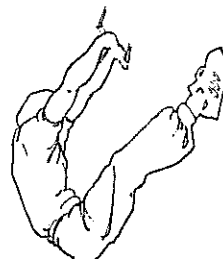
30 reps (s)

1/4 Sit-Ups

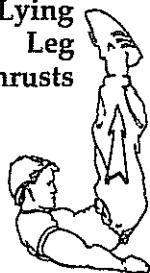


10 reps (f)

The Routines *Illustrated*, continued...

LEVEL 5	 Hanging Knee-ups 25 reps (m) 10 second rest  Hanging Knee-ups 20 reps (m)  HFL Lying Leg Thrusts 20 reps (m) 10 second rest
LEVEL 6	 Hanging Leg Raises 5 reps (m) 10 second rest  Hanging Leg Raises 5 reps (m)  Hanging Knee-ups 10 reps (m)
LEVEL 7	 Hanging Leg Raises 10 reps (m)  Hanging Knee-ups 5 reps (m) 15 second rest  Hanging Leg Raises 5 reps (m)

**HFL Lying
Leg
Thrusts**



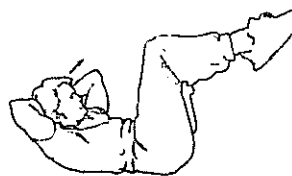
15 reps (m)

**Abdominal
Crunches**



35 reps (s)

1/4 Sit-Ups



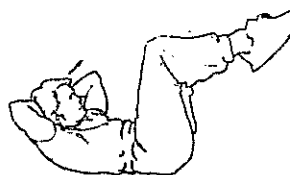
15 reps (f)

**Abdominal
Crunches**



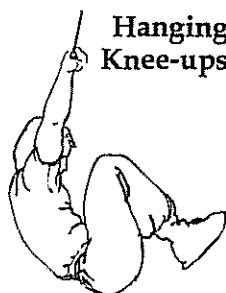
35 reps (s)

1/4 Sit-Ups



15 reps (f)

**Hanging
Knee-ups**



5 reps (m)

**HFL Lying
Leg
Thrusts**



25 reps (m)

**Abdominal
Crunches**



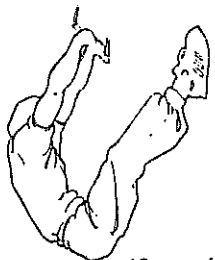
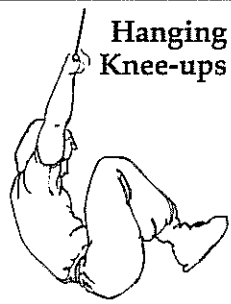
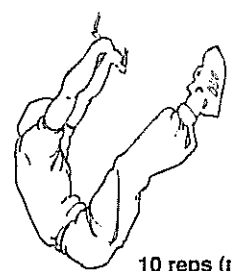
35 reps (s)

1/4 Sit-Ups

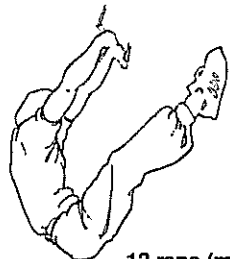
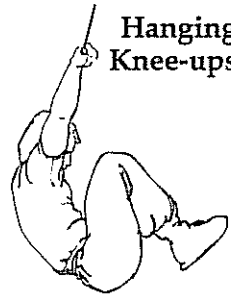
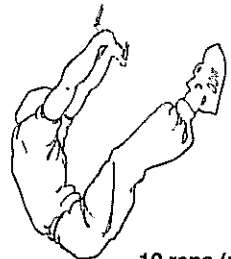


15 reps (f)

The Routines *Illustrated*, continued...

L E V E L 8	Hanging Leg Raises  10 reps (m)	Hanging Knee-ups  5 reps (m)	10 second rest	Hanging Leg Raises  10 reps (m)
--------------------------------	---	--	----------------------	---

HFL Lying Leg Thrusts  30 reps (m)	10 second rest
--	----------------------

L E V E L 9	Hanging Leg Raises  12 reps (m)	Hanging Knee-ups  as many as possible (m)	10 second rest	Hanging Leg Raises  10 reps (m)
--------------------------------	---	---	----------------------	---

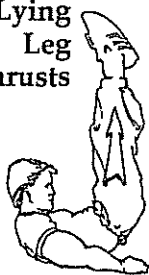
HFL Lying Leg Thrusts  20 reps (m)	10 second rest
--	----------------------



**Hanging
Knee-ups**

5 reps (m)

**HFL Lying
Leg
Thrusts**



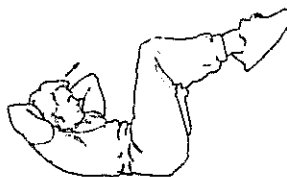
25 reps (m)

**Abdominal
Crunches**



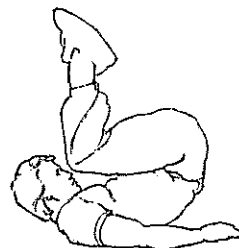
35 reps (s)

1/4 Sit-Ups

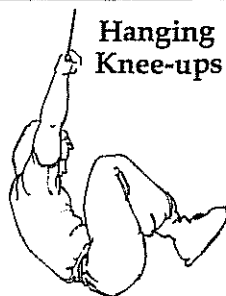


15 reps (f)

Knee Rock-backs



15 reps (m)



**Hanging
Knee-ups**

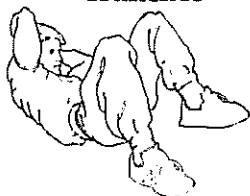
as many as possible (m)

**HFL Lying
Leg
Thrusts**



30 reps (m)

**Cross-Knee
Abdominal
Crunches**



as many as possible (s)

**Abdominal
Crunches**

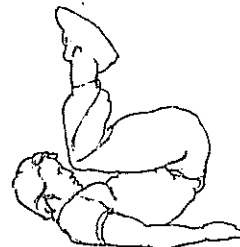


1/4 Sit-Ups



15 reps (f)—Good Luck!

Knee Rock-backs



20 reps (m)

THE SCHEDULE—HOW MUCH, HOW OFTEN

Beginning

If you're new to abdominal training, start at Level A and do the program 3 times per week, with at least one day off between sessions (e.g. M/W/F).

When this gets too easy—and before advancing to Level 1—switch to 4 times per week, grouping workout days in pairs (e.g. M/T/Th/F). You should be able to move up to the next level within a month.

If you wish to add the optional Hyperextensions (see page 18), aim for 1 or 2 sets of 10 to 12 reps. Do these after your back routine if you do weight training exercises for your back, or after the *Legendary Abs* routine if you don't.

Intermediate

Start at Level 1 doing the program 3 days per week with at least one day off between sessions (e.g. M/W/F). When this gets too easy—and before advancing to Level 2—switch to 4 times per week, grouping workout days in pairs (e.g. M/T/Th/F).

If you plan to add the optional Hyperextensions (see page 18), aim for 2 or 3 sets of 10 to 12 reps. Do these after the *Legendary Abs* routine, or after any other work you do for the back muscles.

BEGINNER AND INTERMEDIATE SEQUENCES

Start Up

MONDAY	WEDNESDAY	FRIDAY
<i>Legendary Abs</i>	<i>Legendary Abs</i>	<i>Legendary Abs</i>

Ongoing

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<i>Legendary Abs</i>	<i>Legendary Abs</i>	—rest—	<i>Legendary Abs</i>	<i>Legendary Abs</i>	—rest—

Advanced

If you already have been doing extensive training including **Hanging Leg Raises done with correct form** (see page 7), start at Level 7 or 8, training 4 days a week, grouped in pairs (e.g. M/T/Th/F). If you have access to a lat pull-down machine, add 2 sets of Pull-Down Ab Crunches on the first day of each pair.

Perform Hyperextensions following your normal back work, or following *Legendary Abs* on any "non-back" days.

ADVANCED SEQUENCE

Standard

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Leg. Abs	Leg. Abs	—rest—	Leg. Abs	Leg. Abs	—rest—
Pull-Down Ab Crunches			Pull-Down Ab Crunches		

With 5-day/3-week Routine from *Secrets of Advanced Bodybuilders, Supplement #1*

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Leg. Abs	Leg. Abs	no abs	—rest—	Leg. Abs	Leg. Abs

With the *Secrets Supplement #1* 5-day/3-week program, do Pull-down Ab Crunches on the same days you work lower body; do Hyperextensions at the end of your back workout.

SELF-EVALUATION: How To Determine When To Advance Levels

Very often, a person will master some parts of a level while still struggling with other parts of it. This complicates the question of whether to advance to the next level.

Although the decision to move up must be based largely on a subjective assessment of your overall progress, this simple test will help you make that assessment. Take this test whenever you feel it may be time to move to the next level.

INSTRUCTIONS

Go to the test page corresponding to the level you're on. Perform the routine. Fill in the number of reps you're able to do for each exercise. If your rep number for an exercise falls within the goal range for that exercise, put a check in the **ACHIEVED** box. Figure out the total number of reps you performed in the entire routine and enter that number at the bottom of the column.

To "pass" the test, you must have checked all of the **ACHIEVED** boxes, and your rep total must be above the **'TOTAL REPS' REP GOAL** listed. The instructions at the end of the test will help you determine whether you've passed or not.

In case you need to take the test for a particular level more than once, each test grid has three columns for additional trials.

Sample Level

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
HFL Lying Leg Thrusts	19				19 - 20 reps	✓
1/4 Sit-Ups	24				23 - 25 reps	✓
TOTAL REPS:	43				44 reps	no

Write in the numbers of reps you do when you take the test.

Check here if number of reps done is within the range specified to the left in the 'Rep Goal' column.

Total up all reps done for this level and enter total here.

Check here if Total Reps done is equal to or greater than the goal specified to the left in the 'Rep Goal' column.

If you haven't passed, don't be discouraged! Passing the test isn't the idea—getting results is. Not passing means you're still making progress and you don't have to move up to a harder level yet.

If you do pass the test, you must ask yourself the key question: *Am I still getting results?* If the answer is yes, continue on the same level as before. Only if the answer is no, should you move up. Remember, there's no reason to work harder when you can get the same results with less work.

THE TESTS

Level A

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
HFL Lying Leg Thrusts					14 - 15 reps	
1/4 Sit-Ups					23 - 25 reps	
HFL Lying Leg Thrusts					7 - 10 reps	
1/4 Sit-Ups					17 - 20 reps	
TOTAL REPS:					65 reps	

—If you have checked all the **ACHIEVED** boxes and you are no longer getting results, move up to Level 1.

Level 1

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
HFL Lying Leg Thrusts					23 - 25 reps	
HFL Lying Leg Thrusts					17 - 20 reps	
Abdominal Crunches					24 - 25 reps	
1/4 Sit-Ups					8 - 10 reps	
TOTAL REPS:					76 reps	

—If you have checked all the **ACHIEVED** boxes and you are no longer getting results, move up to Level 2.

Level 2

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Knee-ups					9 - 10 reps	
Hanging Knee-ups					6 - 8 reps	
Abdominal Crunches					24 - 25 reps	
Abdominal Crunches					17 - 20 reps	
TOTAL REPS:					59 reps	

—If you have checked all the ACHIEVED boxes and you are no longer getting results, move up to Level 3.

Level 3

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Knee-ups					14 - 15 reps	
Hanging Knee-ups					8 - 10 reps	
HFL Lying Leg Thrusts					14 - 15 reps	
Abdominal Crunches					19 - 20 reps	
1/4 Sit-Ups					8 - 10 reps	
TOTAL REPS:					66 reps	

—If you have checked all the ACHIEVED boxes and you are no longer getting results, move up to Level 4.

Level 4

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Knee-ups					19 - 20 reps	
Hanging Knee-ups					13 - 15 reps	
HFL Lying Leg Thrusts					19 - 20 reps	
HFL Lying Leg Thrusts					13 - 15 reps	
Abdominal Crunches					27 - 30 reps	
1/4 Sit-Ups					8 - 10 reps	
TOTAL REPS:					104 reps	

—If you have checked all the ACHIEVED boxes and you are no longer getting results, move up to Level 5.

Level 5

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Knee-ups					24 - 25 reps	
Hanging Knee-ups					17 - 20 reps	
HFL Lying Leg Thrusts					19 - 20 reps	
HFL Lying Leg Thrusts					13 - 15 reps	
Abdominal Crunches					30 - 35 reps	
1/4 Sit-Ups					13 - 15 reps	
TOTAL REPS:					124 reps	

—If you have checked all the **ACHIEVED** boxes and you are no longer getting results, move up to Level 6.

Level 6

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Leg Raises					5 reps	
Hanging Leg Raises					4 - 5 reps	
Hanging Knee-ups					9 - 10 reps	
Abdominal Crunches					33 - 35 reps	
1/4 Sit-Ups					12 - 15 reps	
TOTAL REPS:					66 reps	

—If you have checked all the **ACHIEVED** boxes and you are no longer getting results, move up to Level 7.

Level 7

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Leg Raises					9 - 10 reps	
Hanging Knee-ups					5 reps	
Hanging Leg Raises					5 reps	
Hanging Knee-ups					4 - 5 reps	
HFL Lying Leg Thrusts					22 - 25 reps	
Abdominal Crunches					33 - 35 reps	
1/4 Sit-Ups					12 - 15 reps	
TOTAL REPS:					95 reps	

—If you have checked all the **ACHIEVED** boxes and you are no longer getting results, move up to Level 8.

Level 8

Exercise	Trial 1	Trial 2	Trial 3	Trial 4	Rep Goal	Achieved
Hanging Leg Raises					9 - 10 reps	
Hanging Knee-ups					4 - 5 reps	
Hanging Leg Raises					8 - 10 reps	
Hanging Knee-ups					4 - 5 reps	
HFL Lying Leg Thrusts					29 - 30 reps	
HFL Lying Leg Thrusts					22 - 25 reps	
Abdominal Crunches					35 reps	
1/4 Sit-Ups					13 - 15 reps	
Knee Rock-backs					15 reps	
TOTAL REPS:					146 reps	

—If you have checked all the **ACHIEVED** boxes and you are no longer getting results, move up to Level 9.

Answers to Some Often-Asked Questions

Q: I already do some of these exercises. What's so special about the *Legendary Abs* program?

A: There's no comparison between doing the routines presented here, and doing some of the same exercises haphazardly. That's the whole point: you obtain a dramatic increase in the efficiency of an abdominal routine—or any routine—if the interdependency of the muscle groups is taken into consideration. *Legendary Abs* will accomplish what a random approach never will, and will do it in record time.

Q: I work out quite a bit and spend a good deal of time working to keep my stomach flat. How can just a few minutes worth of exercise equal that?

A: Synergism! (See page 3.)

Q: I don't have any place to do the hanging exercises. What can I do?

A: Try a doorway-mounted chinning bar. These are inexpensive and available from most sporting goods stores. Be sure to get the kind with metal brackets that screw into the door frame to prevent the bar from coming loose while you're hanging. Keep your knees bent so your feet don't drag.

Q: Suppose there's no place I can set up a chinning bar. Is there some exercise I can substitute for Hanging Leg Raises?

A: Unfortunately, no other exercise creates such ideally poor leverage for the lower abs

while at the same time preventing the lower back from arching. Any substitution potentially decreases the effectiveness of the program.

However, if no chinning bar is available, a possible (though less desirable) alternative is the hanging chair found on many Universal machines (often mistakenly referred to as a Roman Chair). The drawback of using this chair is that it encourages your lower back to arch, and you'll have to work extra hard to keep your pelvis tilted up throughout the exercise. Doing leg raises with an arched back is worse than not doing them at all.

If, and only if, finding a suitable place to hang proves impossible, should you make the following adjustments to the program:

- Substitute an extra set of HFL Lying Leg Thrusts, according to the table below. This extra set should be done first, in place of *all* hanging sets on a given level.
- Skip program levels 2 through 4 entirely. In other words, when you are ready to move up from Level 1, go directly to Level 5. Levels 2 through 4 are designed to prepare you for Hanging Leg Raises. Since you won't be doing Hanging Leg Raises, these levels are not useful to you. For the same reason, skip Level 6.

SUBSTITUTING HFL LYING LEG THRUSTS FOR ALL SETS, HANGING EXERCISES

LEVEL 5.....	Substitute 1 set, 25 reps
LEVEL 7.....	Substitute 1 set, 30 reps
LEVEL 8.....	Substitute 1 set, 30 reps
LEVEL 9.....	Substitute 1 set, 30 reps

Q: What if I don't have a lat pull-down bar for the Pull-Down Ab Crunches?

A: Pull-Down Ab Crunches, which require the kind of lat pull-down bar found in most gyms, is an optional exercise; the program is complete without it. We have included it in the course to help serious bodybuilders gain a competitive edge.

If you don't have access to a lat pull-down machine, another way to do Pull-Down Ab Crunches is by grasping both ends of an elastic band—slung over your chinning bar—and using the band to provide resistance.

Q: How do I know when it's time to move up to the next level?

A: There are no extra points for moving up to the higher levels—your goal should be to stay on each level as long as possible. As long as you are seeing results on a level, stay there. When you think it's time to move up, take the appropriate test in the Self-Evaluation Section, beginning page 34.

Q: I'm not feeling a burn after doing hanging exercises. Does this mean I'm doing them wrong or is it time to move to the next level?

A: Neither. The program is designed to generate a cumulative fatigue level, leaving you with a burn at the end of the routine—not in the middle. If you're able to get through the whole routine without a burn, check for correct form, and then take the appropriate test in the Self-Evaluation Section. It may be time to move up.

Q: Should I do *Legendary Abs* before or after aerobic work?

A: If you're doing a long aerobic workout involving calisthenics, do *Legendary Abs* first. Otherwise, use aerobic work like running, swimming, cycling, or jumping rope as a warm-up for the ab routines.

Q: Will *Legendary Abs* help me lose my "love handles"—those extra bulges on the sides of my waist?

A: *Legendary Abs* is designed to tone the abdominal muscles. Getting rid of love handles, on the other hand, means losing excess fat. These are separate processes, but they can be done simultaneously. For a complete, scientific explanation of body fat reduction, see Health For Life's course, Synershape.

Q: What about doing side bends? I've always heard those are the best exercise for your sides. In fact, I've even started doing them holding weights in my hands...

A: Stop! The obliques are one of the fastest muscles to develop and one of the slowest to disappear—and doing side bends with weights is the perfect way to develop them. The result: permanent, muscular "love handles!" Yes, you want to tone the obliques, but the twisting exercises in *Legendary Abs* will do all the toning necessary.

Q: What about seated twists?

A: Seated twists fall into a category with other ab/waist/lower back calisthenic exercises—they are neither particularly effective nor particularly harmful.

The biggest problem is not with the exercises themselves but with the expectations of the people doing them. They try to make them do

double duty, toning the abs/waist/lower back *and* getting rid of fat in those areas. Remember, these are two separate goals requiring two separate types of exercise. To lose fat you must combine aerobic exercise (running, swimming,

cycling, etc.) with proper nutrition to get your body burning more calories than it takes in.

And to condition abdominal muscle, there is nothing as effective as *Legendary Abs!*

High Reps:

An Open Letter To an Advanced Bodybuilder

The following response was addressed to an advanced bodybuilder, and deals with the issue of doing high numbers of reps. Although this specific question is not one beginning bodybuilders should be concerned with, the letter as a whole sheds valuable light on many of the concepts discussed in this course.

Dear Mr. ———

Given the high number of Ab Crunches you've been doing, it's possible you may need to increase beyond the number of reps specified for Level 9. I will make specific recommendations in a moment, but first, some general comments:

Nine times out of ten, when an advanced bodybuilder is having trouble with a particular body part, it's because he or she has an incorrect or incomplete concept of how that part should be trained. The misconceptions can be very broad (for instance, the outright fallacy that Straight-Legged Sit-Ups are a good ab exercise) or very subtle (a misguided kinesiologic sense, or inaccurate perception of how a particular muscle should *feel* when being trained.)

One good example of patently false "common knowledge" is the idea that building forearms and calves take excessive numbers of reps "because those muscles are so much denser than the other muscles in the body, and because you use those muscles so much."

Bunk!

It's true that calves are under tension much of the day from walking. It's true the forearms are used constantly because we use our hands constantly. But what this builds is their *endurance*—their ability to get rid of the waste products that result from muscular energy production.

Their **strength** threshold is only slightly affected by constant use. However, if you use a weight that allows a muscular overload on the seventh or eighth rep, it's perfectly possible to achieve calf or forearm growth doing short sets.

The important element in all training is finding a **synergistic** combination/sequence of exercises—to get you around the inevitable problem of strong supporting muscles relieving the load on the muscle you're trying to work. When this concept is fully implemented, any body part can be trained more completely (more fibers involved) and more quickly than it can through traditional techniques.

Mike Mentzer was on the right track with his intense forced reps/negative reps program. However, this was a case of taking a *single concept*—working a muscle for a short period, but so intensely that even the "deep" fibers are innervated—and building a program on that concept alone.

Synergism dictates that all available scientific information be amassed, and all conclusions drawn from that information be used to provide a basis for each individual's "ideal" program. It is possible to eliminate potentially harmful exercises from our workouts. It is possible to determine a most effective order for the most effective exercises for a particular body part. It is possible to go beyond saying "This exercise is good for this body part. So's this one. I guess I'll do 5 sets of 6 to 8 reps of each and call that my program." Don't get me wrong—hit or miss scheduling does yield results...

...slowly.

The point is that when thinking about increasing rep numbers, it's important to consider the way the elements of the program work together. Hanging Leg Raises and HFL Lying Leg Thrusts are first in the program because they work the lower abs and have the potential to burn you out fast, since they afford the abs the worst possible leverage. Consequently, subsequent exercises shouldn't require high rep numbers to do their job.

If you feel the need to do 200 Crunches, it's probably because you are not doing enough Leg Raises, or because you're not doing them properly. I assume you know all about concentrating on the muscle you're trying to work, but humor me and take another look at the picture of the *wrong* way to do Hanging Leg Raises. (page 7) Doing them without the hips rocking forward maximizes psoas involvement and minimizes ab involvement. If you do them like that, you will never get a burn out of the program because the initial fatiguing is not taking place.

By the way, doing Hanging Leg Raises incorrectly is deceptive—you may still *feel* them in your abs. Not as much as when you do them correctly, but enough to fool you into thinking your abs are being properly targeted.

If you can easily handle the recommended numbers of reps for both kinds of leg raises, try increasing to 25 or 30 Hanging Leg Raises and 10 Knee-ups, and then 40 or so reps per set of HFL Lying Leg Thrusts (more if necessary). Just be sure to maintain the proportions of one exercise to another as presented in the routines. You could also try using ankle weights.

As far as the number of Ab Crunches and 1/4 Sit-Ups goes: If, after increasing the number of leg raises, you still need to do 200 or more to get a burn, it's OK to do that many. **Keep the exercise order the same, though.**

In the fifteen years I have been working with bodybuilders and different versions of this program, there has never been a case where, given the sorts of questions you are asking, the answer did not lie at least in part in improving mental focus during the exercises. It's easy to disappear into a mental void while cranking out high numbers of reps. This just doesn't work. Every rep must be the most important ever!

Good Luck, and Happy Training!

Jerry Robinson
President, Health For Life

GLOSSARY

Abdominals: Technically, the *rectus abdominis* (see bottom of this column); less technically, the superficial muscles in the abdominal region: the *rectus abdominis* and the *external obliques*.

Abs: Informal term for the abdominals.

Balanced Development: Proportional development of opposing muscle groups (e.g. biceps/triceps).

Functional Strength: The ability of the body to bring a coordinated muscular effort to bear on external resistance in everyday situations, such as moving a refrigerator.

Leverage: The mechanical advantage provided by position.

Love Handles: Fat deposits on the sides of the body at waist level.

Obliques, External: Muscles that travel from the lower eight ribs diagonally down and forward to the edge of the rectus abdominis.

Obliques, Internal: Muscles that lie underneath the external obliques, and run from the top of the hip bone diagonally up and forward to the bottom of the rib cage and the edge of the rectus abdominis.

Optimization: Maximizing output for a given input.

Overloading: Forcing a muscle to act against resistance greater than that which it can easily overcome.

Rectus Abdominis: Muscles running from the bottom of the rib cage to the top of the pubic bone (see *abs*, *abdominals*).

Resistance: The opposition to motion resulting from the combined effect of load and leverage.

Synergism: Combining elements to create a whole greater than the sum of those elements.

Tension: Muscular contractile force.

Timing: (Also called *pace*.) The combination of rep speed, rests between sets, and rests between exercises.

